

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA

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FEDERAL ENERGY)	
REGULATORY COMMISSION,)	
)	
Plaintiff,)	
)	
v.)	
)	
GREENHAT ENERGY, LLC,)	Civ. Action No.
JOHN BARTHOLOMEW, KEVIN)	
ZIEGENHORN, AND LUAN)	
TROXEL, IN HER CAPACITY AS)	
EXECUTOR OF THE ESTATE)	
OF ANDREW KITTELL)	
)	
Defendants.)	
)	

COMPLAINT

The Federal Energy Regulatory Commission (“Commission” or “FERC”) seeks enforcement by this Court of remedies imposed by the Commission for one of the largest electricity market frauds in American history. In a scheme they implemented between 2015 and 2018, GreenHat Energy, LLC (“GreenHat”), John Bartholomew, Kevin Ziegenhorn, and Andrew Kittell (represented here by his Estate) (collectively “Defendants”) defrauded the regional wholesale electricity market operated by PJM Interconnection, Inc. (“PJM”), headquartered in Norristown, Pennsylvania. By purchasing PJM-issued financial assets with no intent to pay for them, and then selling as many of the assets as possible to third parties, Defendants obtained \$13.1 million in cash for themselves while imposing more than \$179 million in losses on other PJM members,

including utilities whose costs are passed on to consumers. By doing so, Defendants violated both the Federal Power Act (“FPA”) and Commission regulations implementing the Act.

Because the Defendants have failed to pay the penalties imposed by the Commission or to return their unjust profits, the Commission is filing this action to seek enforcement of those remedies. Under the FPA, this Court has “[the] authority to review de novo the law and the facts involved,” and “has jurisdiction to enter a judgment enforcing, modifying, and enforcing as so modified, or setting aside in whole or in Part,” the Commission’s penalty assessment. FPA § 31(d)(3)(B), 16 U.S.C. § 823b(d)(3)(B) and FPA § 316A(b), 16 U.S.C. § 825o-1 (incorporating procedures of FPA Section 31).

SUMMARY OF THE ACTION

1. PJM is a regional wholesale electricity market that operates the wholesale electricity grid in thirteen states ranging from North Carolina to Illinois. PJM conducts daily auctions in which power plants and other generators offer to sell electricity and utilities bid to buy it. PJM also conducts longer-term markets for a type of financial instrument called “Financial Transmission Rights,” or “FTRs,” which make or lose money based on future prices in daily PJM energy auctions. PJM allows not only generators and utilities but also financial traders such as GreenHat to participate in both daily and FTR markets.

2. Between 2015 and 2018, John Bartholomew, Kevin Ziegenhorn, and Andrew Kittell, through GreenHat, engaged in a scheme to defraud PJM's FTR market.

Defendants' conduct was a classic fraud, similar to a scheme in which one purchases large volumes of goods with a credit card, with no intent to pay for them, and then sells the goods to third parties at a discount to raise immediate cash. (This type of fraud is sometimes called a "bust-out" scheme.)

3. In PJM's FTR market, participants can purchase instruments that settle (i.e., result in profits or losses) years in the future. Instead of selecting FTRs based on an analysis of market fundamentals and the likelihood that they would be profitable in the future, Defendants chose FTRs based on minimizing the amount of cash that GreenHat would need to post as collateral. By doing so, Defendants, who had never before traded FTRs, built up a huge portfolio, with virtually no collateral to protect other market participants if GreenHat defaulted.

4. Although GreenHat's portfolio was not designed to be—and was not—profitable overall, it included some FTRs that increased in value after GreenHat purchased them. To monetize these assets before they settled, between September 2016 and April 2018, GreenHat sold profitable FTRs in its portfolio in private, "bilateral" deals with two other firms: Shell Energy North America (US) ("Shell") and Boston Energy Trading & Marketing, LLC ("BETM"). Shortly after GreenHat was paid by Shell and BETM, the three individual Defendants transferred the funds to their own personal accounts.

5. Through these sales to Shell and BETM, Bartholomew, Ziegenhorn, and Kittell obtained \$13.1 million in cash for themselves. But because Defendants purchased FTRs based on minimizing collateral rather than building a profitable portfolio, GreenHat's portfolio as a whole was very unprofitable. GreenHat therefore defaulted in June 2018 when its long-term FTRs began to settle. As a result, between June 2018 and May 2021, other members of PJM, including electric utilities such as PECO that pass their costs on to retail electricity customers—had to pay more than \$179 million to cover GreenHat's losses.

6. To increase their profits from their overall scheme, Defendants engaged in other forms of fraud, including (i) making false statements to PJM with the intent to convince it not to proceed with a planned margin call, which would have prevented Defendants from continuing to participate in PJM's FTR market and (ii) submitting inflated bids into FTR auctions to benefit GreenHat in its sales of FTRs to Shell.

7. After an extensive investigation by FERC's Office of Enforcement ("Enforcement") and an adjudicative agency proceeding before the Commission, the Commission issued an Order Assessing Civil Penalties against Defendants on November 5, 2021. *GreenHat Energy LLC et al.*, 177 FERC ¶ 61,073 ("Penalty Order" or "Order"). The Order is attached as Exhibit 1 and incorporated in this Complaint by reference.

8. In the Penalty Order, the Commission found that Defendants violated FPA Section 222(a), 16 U.S.C. § 824v(a), and the Commission's Anti-Manipulation Rule, 18 C.F.R. § 1c.2 (2020), by engaging in a scheme to defraud PJM's FTR market. The

Commission also found that GreenHat violated two Commission-jurisdictional agreements governing relations between GreenHat and PJM—Attachment Q, § 1a.B of PJM’s Open Access Transmission Tariff (“Tariff”) and § 15.1.3 of PJM’s Amended and Restated Operating Agreement (“Operating Agreement”)—by making false representations to PJM and by defaulting on its obligation to pay PJM what it owed on its FTR portfolio.

9. The Commission’s Penalty Order directed GreenHat, Bartholomew, Ziegenhorn, and the Kittell Estate, jointly and severally, to disgorge \$13,072,428, plus interest; ordered GreenHat to pay a civil penalty of \$179,600,573; and ordered Bartholomew and Ziegenhorn each to pay a civil penalty of \$25,000,000.

10. Defendants failed to pay the assessed penalties and disgorgement within 60 days after issuance of the Penalty Order. The Commission is therefore filing this Complaint seeking affirmance of the Penalty Order. *See* FPA Section 31(d)(3)(B), 16 U.S.C. § 823b(d)(3)(B) & FPA Section 316A(b), 16 U.S.C. § 825o-1 (incorporating procedures of FPA Section 31).

I. THE PARTIES

11. Plaintiff Federal Energy Regulatory Commission is an administrative agency of the United States, organized and existing as an independent, bipartisan Commission, pursuant to, *inter alia*, the FPA, 16 U.S.C. §§ 791a *et seq.* Under the FPA, the Commission is charged with, among other things, ensuring just and reasonable prices of wholesale electricity and regulating and policing wholesale electricity markets.

12. Defendant GreenHat is a Texas corporation. GreenHat had its principal place of business in Texas until January 2018. Since then, its principal place of business has been in California. GreenHat participated in PJM's FTR market between 2014 and 2018.

13. John Bartholomew and Kevin Ziegenhorn are residents of Houston, Texas. Andrew Kittell was a resident of Houston, Texas until mid-2017. He then moved to Coronado, California, where he lived until his death in January 2021.

14. Bartholomew, Ziegenhorn, and Kittell knew one another from their prior work at JP Morgan, and all had extensive experience in the energy industry. They formed GreenHat in 2014 to conduct business in PJM's FTR market.

15. From July 2014 until January 2018, Bartholomew, Ziegenhorn, and Kittell were co-owners of GreenHat, either directly or through their ownership interests in Off Fannin Holdings, LLC, which owned GreenHat starting in March 2015. In January 2018, Kittell bought out Bartholomew and Ziegenhorn's interests in GreenHat and its parent company, subject to an agreement to share future revenues with Bartholomew and Ziegenhorn.

16. From July 2014 until January 2018, Bartholomew, Ziegenhorn, and Kittell together managed GreenHat's activities in PJM's FTR market. Until mid-2017, all three Defendants collaborated closely on GreenHat's business in person in a rented apartment in Houston, Texas.

II. JURISDICTION AND VENUE

17. This Court has subject matter jurisdiction over this action pursuant to FPA Section 31(d)(3)(B), 16 U.S.C. § 823b(d)(3)(B); FPA Section 316A(b), 16 U.S.C. § 825o-1(b); FPA Section 317, 16 U.S.C. § 825p; and 28 U.S.C. § 1331.

18. This Court has personal jurisdiction over each of the Defendants pursuant to Rule 4(k)(1)(C) of the Federal Rules of Civil Procedure because FPA Section 317, 16 U.S.C. § 825p, provides for nationwide service of process and therefore satisfies this subdivision of Rule 4, which states that “[s]erving a summons or filing a waiver of service establishes personal jurisdiction over a defendant . . . when authorized by a federal statute.” Defendants are subject to personal jurisdiction based on their contacts with the United States, including GreenHat’s incorporation in Texas and maintenance there of its principal place of business from 2014 to 2018; Bartholomew’s, Ziegenhorn’s, and Kittell’s residence in Texas; Kittell’s residence in California; and GreenHat’s transaction of business with PJM in Pennsylvania and with BETM in Massachusetts.

19. Venue properly lies within the Eastern District of Pennsylvania pursuant to FPA Section 317, 16 U.S.C. § 825p, because the acts and transactions constituting the violations occurred in this District. Defendants engaged in an unlawful scheme to manipulate PJM’s FTR market and to violate PJM’s Tariff. PJM is headquartered in Norristown, Pennsylvania, located in Montgomery County within this District. In the FTR market, transactions are processed through PJM’s servers located in Norristown. Defendants’ unlawful scheme caused harm to PJM, to its members within this District, and to electricity consumers located or doing business in this District.

III. BACKGROUND

A. The Commission's Anti-Manipulation Authority

20. The Commission's core statutory mission under the FPA is to ensure that wholesale prices for the transmission and sale of electric energy in interstate commerce are just and reasonable. *See* FPA Sections 201, 205, 16 U.S.C. §§ 824, 824d. In the wake of the Western Energy Crisis of 2000-2001 and the resulting unjust and unreasonable rates caused by Enron Corporation's manipulative schemes, Congress, through the Energy Policy Act of 2005, Pub. L. 109-58 ("EPAcT 2005"), amended the FPA to give the Commission two new enforcement tools. *First*, EPAcT 2005 gave the Commission the authority to assess civil penalties of up to \$1 million per day, per violation, against any person who violates Part II of the FPA (concerning wholesale electric markets) or any rule or order thereunder. FPA Section 316A(b), 16 U.S.C. § 825o-1(b); *see* FPA Section 3(4), 16 U.S.C. § 796(4) (defining "person" to include an individual or corporation). *Second*, EPAcT 2005 provided additional authority to prohibit market manipulation in Part II of the FPA. In relevant part, FPA Section 222, 16 U.S.C. § 824v(a), makes it:

unlawful for any entity . . . directly or indirectly, to use or employ, in connection with the purchase or sale of electric energy . . . any manipulative or deceptive device or contrivance (as those terms are used in section 10(b) of the Securities Exchange Act of 1934 (15 U.S.C 78j(b))), in contravention of such rules and regulations as the Commission may prescribe as necessary or appropriate in the public interest or for the protection of electric ratepayers.

21. After EPAcT 2005 became law, the Commission promulgated the Anti-Manipulation Rule, 18 C.F.R. § 1c.2, which prohibits an entity from: (1) using a

fraudulent device, scheme, or artifice, or making a material misrepresentation or a material omission as to which there is a duty to speak under a Commission-filed tariff, Commission order, rule, or regulation, or engaging in any act, practice, or course of business that operates or would operate as a fraud or deceit upon any entity; (2) with the requisite scienter; (3) in connection with the purchase or sale of electricity subject to the jurisdiction of the Commission. 18 C.F.R. § 1c.2; *Prohibition of Energy Market Manipulation*, Order No. 670, 114 FERC ¶ 61,047, at P 49 (2006) (“Order No. 670”).

22. In Order No. 670, the Commission stated that it “defines fraud generally, that is, to include any action, transaction, or conspiracy for the purpose of impairing, obstructing or defeating a well-functioning market. Fraud is a question of fact that is to be determined by all the circumstances of a case.” *Id.* P 50.

23. The Commission determined in Order No. 670 that the term “any entity” includes natural persons. *Id.* P 18. Every court that has considered the issue has agreed with the Commission. *See FERC v. Coaltrain Energy, L.P.*, 2018 WL 7892222, at **9-10 (S.D. Ohio 2018); *FERC v. City Power Marketing, LLC*, 199 F. Supp. 3d 218, 239-41 (D.D.C. 2016); *FERC v. Maxim Power Corp.*, 196 F. Supp. 3d 181, 200-02 (D. Mass. 2016); *FERC v. Silkman*, 177 F. Supp. 3d 683, 709-11 (D. Mass. 2016); *FERC v. Barclays Bank PLC*, 105 F. Supp. 3d 1121, 1145-46 (E.D. Cal. 2015).

24. Under both securities law and energy law, traders are presumed to be trading on the basis of their best estimates of an instrument’s underlying economic value; trading for other purposes, including in computerized open markets such as PJM’s FTR market, can be deceptive. *See, e.g., FERC v. Coaltrain Energy, L.P.*, 2018 WL 7892222 at *12

(S.D. Ohio 2018); *FERC v. City Power Mktg., LLC*, 199 F. Supp. 3d at 235 (D.D.C. 2015).

B. PJM and Its FTR Market

25. PJM is a Regional Transmission Organization that is subject to FERC’s regulation under the FPA. The Commission has exclusive jurisdiction over the terms and conditions of, and rates for, wholesale electric service, pursuant to which it approves tariffs filed by PJM and similar entities. PJM operates the wholesale electricity market in parts or all of thirteen states under its Commission-approved Tariff.

26. Trading locations wholly within PJM’s control area are called “nodes.” PJM uses day-ahead markets and same-day (or “real-time”) markets to balance supply and demand and set wholesale prices for electricity at each node.

27. PJM’s day-ahead and real-time markets use locational marginal prices (“LMPs”) for settlements of wholesale electric purchases and sales at each node. LMPs have three components: (1) the marginal cost of energy; (2) the marginal cost of grid congestion at a particular node, and (3) the marginal cost of transmission line losses at a particular node, i.e., the cost of electric power lost to heat while traveling over transmission lines.

28. In addition to day-ahead and real-time markets, PJM operates a market for FTRs, which are financial instruments that are based on the second (congestion cost) component of LMPs. Specifically, FTRs make or lose money based on the difference between congestion costs at two different nodes during a specified, delimited future

period. Utilities can use FTRs to hedge against future congestion. PJM also permits financial firms such as GreenHat to trade FTRs for speculative purposes.

29. FTRs are purely financial instruments. To participate in an FTR auction, a market participant must be a member of PJM and meet PJM's established credit requirements for the FTR.

30. Whether an FTR is profitable or unprofitable for its holder depends on whether the economic value of the FTR (determined by the difference in congestion price between the "sink" node and the "source" node) is greater or less than the FTR's purchase price for the specified hours over the period covered. During the time of the conduct at issue, FTRs were sold for periods that lasted a month, a quarter, a year, and three years. Each type of FTR can be bought for peak hours only, off-peak hours only, or all hours. FTRs with a duration of one year and longer can be traded in PJM's long-term FTR auctions, which are held at regularly specified intervals.

31. An entity can purchase or sell an FTR by submitting a bid or offer into one of the PJM auctions. Based on all of the bids and offers and on other information, PJM calculates a clearing price for each FTR.

32. Of critical importance here, successful bidders do not need to pay the purchase price of their FTRs right away. Instead, with the exception of collateral, an FTR holder incurs no financial consequences until the FTRs settle, which may be years in the future. Before settlement, an FTR holder's only financial obligation to PJM is to deposit with PJM the required amount of collateral based on its portfolio of FTRs.

33. FTRs settle on an hourly basis based on the difference in the day-ahead congestion cost between the source and sink nodes for each hour. PJM settles with the FTR holder on a weekly basis. If the FTR is profitable, PJM credits the holder with the amount of profit. If the FTR is unprofitable, PJM invoices the holder for the amount of loss.

34. When an FTR holder defaults, the revenue shortfall is funded through an allocation of the unpaid amount to other members of PJM, including electric utilities that pass on their costs to households and other retail customers.

35. In addition to being able to buy and sell FTRs in PJM auctions, market participants can trade FTRs with each other directly or “bilaterally.” Payments in a bilateral sale occur separate from PJM settlement of that FTR, and a party selling an FTR bilaterally may receive a cash payment for that FTR years before it settles. PJM provides a portal on its FTR Center through which market participants are required by the Tariff to record the transfer of ownership of an FTR from one party to another.

C. FTR Credit Requirements

36. During the period relevant to GreenHat’s participation in PJM’s FTR market—September 2014 through June 2018—PJM calculated FTR credit requirements “based on FTR cost less a discounted historical value.” PJM Tariff Attachment Q, § V.B. The historical value of an FTR was calculated using “the weighted monthly average historical value over three years for the path using the following weightings: 50% most recent year, 30% prior year; 20% second prior year.” PJM Manual 6, Financial Transmission Rights, § 6.7 (Rev. 17, June 1, 2016).

37. During the relevant time period, PJM provided a Credit Requirements Calculator (“Credit Calculator”) on its website so that market participants could evaluate the credit requirements for their FTR bids before an upcoming auction. The Credit Calculator was an Excel spreadsheet that calculated the user’s credit requirements after the user input information about its proposed purchases, such as the sink and source points for the FTRs, the bid quantity, and the bid price.

38. If the calculated historical value of a particular FTR was higher than the user’s bid price, the user did not need to post collateral to hold the FTR, beyond the minimum amount required to participate in the FTR market (discussed below). For instance, if a buyer bid \$1 for an FTR at a given path, and the calculated weighted historical value of that FTR was \$1.50, PJM did not require the bidder to post additional collateral. In some cases, a market participant could buy additional FTRs while reducing its portfolio’s overall credit requirement; PJM then returned the “excess” collateral to the market participant.

D. Defendants’ Formation and Operation of GreenHat

39. Bartholomew, Ziegenhorn, and Kittell founded GreenHat in July 2014 for the stated purpose of engaging in the lawful purchase and sale of FTRs and related products in the PJM Market. GreenHat became a wholly-owned subsidiary of Off Fannin Holdings, LLC (“Off Fannin”) in March 2015, when Bartholomew, Ziegenhorn, and Kittell formed Off Fannin.

40. GreenHat’s three founders each played a crucial role in GreenHat’s business, which, starting in June 2015, consisted entirely of carrying out a manipulative scheme.

Kittell provided the initial capital of \$3 million to start GreenHat, led most dealings with third parties, and was personally involved in GreenHat's FTR purchases. Bartholomew managed GreenHat's trading. He registered GreenHat with PJM, was identified to PJM as GreenHat's trader and Customer Account Manager, and created the spreadsheets that GreenHat used to identify FTRs to be purchased or sold. As the risk executive, Ziegenhorn was responsible for managing the valuation and risk function at GreenHat. Ziegenhorn also led many of the efforts to secure buyers for GreenHat's FTR portfolio; authorized wire transfers in and out of GreenHat's accounts; and managed the transfer of FTRs between GreenHat and Shell. Finally, all three individual Defendants shared in the \$13.1 million in proceeds from the firm's deals with Shell and BETM.

41. In January 2018, Bartholomew and Ziegenhorn sold their interests in GreenHat to Kittell, with the proviso that all three would share in future profits. Kittell continued to run GreenHat thereafter, including making a deal to sell a package of FTRs to BETM in April 2018. Per the January 2018 buyout agreement, the three individuals shared the \$2 million that GreenHat obtained from BETM in April 2018.

IV. Defendants' Fraudulent Scheme

A. Overview

42. Defendants violated section 222(a) of the FPA and the Anti-Manipulation Rule in four distinct ways:

(1) by engaging in a manipulative scheme in PJM's FTR market in which they acquired an FTR portfolio consisting principally of long-term FTRs with virtually no

upfront cash, planned not to pay for losses at settlement, and obtained money for Bartholomew, Ziegenhorn, and Kittell by selling profitable FTRs to third parties;

(2) by purchasing FTRs based not on market considerations but to amass as many FTRs as possible with virtually no collateral, and with no intent to pay upon default, thereby engaging in a course of conduct for the purpose of impairing, obstructing, or defeating a well-functioning market;

(3) by making false statements to PJM about money purportedly owed by Shell with the intent to convince PJM not to proceed with a planned margin call; and

(4) by submitting bids into the PJM long-term FTR auction with the intent to inflate the clearing price of FTRs that Shell had purchased from GreenHat and offered for sale in the auction, thereby benefiting GreenHat in its deals with Shell.

43. In addition, GreenHat violated PJM Tariff, Attachment Q, § Ia.B and PJM's Operating Agreement, § 15.1.3, by making false certifications to PJM and by failing to comply with its contractual commitment to pay for losses on its FTR portfolio.

B. GreenHat's Early Participation in the FTR Market

44. To be able to purchase and trade FTRs in PJM, GreenHat needed to become a member of PJM and satisfy certain collateral requirements. In September 2014, GreenHat became a member of PJM and posted \$500,000 in collateral with PJM. Under PJM's Tariff, however, in addition to this minimum amount of collateral, GreenHat was required to post additional collateral to conduct actual FTR trades. In October 2014, GreenHat made its first collateral deposit to support its FTR trades, in the amount of \$10,000.

45. Between October and December 2014, GreenHat purchased more than 18 million megawatt-hours (MWh) of annual FTRs, some of which were scheduled to settle as soon as June 2015. GreenHat chose which FTRs to buy with no analysis of market fundamentals or of the likely future profitability of the FTRs. The formula GreenHat used to select FTRs was designed to minimize GreenHat's collateral obligations.

46. In January 2015, Kittell tried to sell GreenHat's entire FTR portfolio to third parties, but instead of getting offers to pay GreenHat for its FTR, he was told that GreenHat would have to pay another company to accept GreenHat's portfolio.

47. When GreenHat's FTRs began to settle on June 1, 2015, they were overall unprofitable, and GreenHat had to pay PJM amounts each week to cover the losses. Between June 2015 and May 2018, GreenHat paid PJM more than \$2 million for losses on the FTRs it acquired in late 2014.

48. GreenHat thus learned from its initial FTR purchases that selecting FTRs based on minimizing collateral did not lead to creation of a profitable portfolio.

C. Starting in June 2015, GreenHat Implements its Manipulative Scheme

49. Beginning in June 2015, GreenHat changed its trading strategy by focusing on acquiring FTRs that would settle years into the future. GreenHat did not select these FTRs based on any data relevant to future congestion changes, such as expected future changes in generation, transmission, or electricity use (or "load"). In fact, in presentations to potential investors, GreenHat described research about fundamentals as inside information of low value that GreenHat did not need when implementing its strategy.

50. Instead, Defendants used PJM's Credit Calculator to choose a set of FTRs that would enable it to keep the smallest possible amount of collateral on deposit with PJM. Bartholomew, Ziegenhorn, and Kittell openly discussed this bidding strategy with third parties, and Bartholomew and Ziegenhorn told a third party that GreenHat's owners planned to have GreenHat default if its portfolio lost money at settlement.

D. By Purchasing FTRs Based on Minimizing Collateral, GreenHat Builds a Huge FTR Portfolio in PJM, With Virtually No Collateral to Support It

51. As GreenHat built a huge portfolio by buying FTRs based on minimizing collateral, its collateral deposits shrank: GreenHat's FTR holdings grew by a factor of 71 from June 2015 to May 2018, from 12.5 million MWh to 889 million MWh, while its cash deposits with PJM shrank by a factor of nine, from \$5,000,000 to \$559,447.

52. During this time, GreenHat went from posting 40 cents of collateral per MWh in June 2015 to posting less than a penny of collateral per MWh in June 2018. By contrast, in June 2018, the top 10 FTR holders in PJM other than GreenHat posted an average of 23 cents per MWh in collateral.

53. In September 2017, both Bartholomew and Kittell calculated the current market value of GreenHat's FTR portfolio—which GreenHat had built by choosing FTRs that would minimize collateral—to be approximately *negative* \$36 million. (Bartholomew and Kittell estimated the current market value by using the prices of the FTRs in a recent PJM auction.) Nevertheless, GreenHat continued to buy FTRs the same way, with a formula designed to minimize collateral. In December 2017, for example,

GreenHat bought more than 148 million MWh of FTRs using the same Credit Calculator methodology.

E. Although Its Portfolio is Unprofitable as a Whole, GreenHat Makes \$13.1 Million by Selling Profitable FTRs to Third Parties, and Then Distributes the Cash to Its Owners

54. Although GreenHat's portfolio was never profitable overall, it did hold individual FTRs that had a positive value. GreenHat sought to sell these profitable FTRs based not on their Credit Calculator value but on their current market value, using the most recent prices set in PJM auctions. Between September 2016 and April 2018, GreenHat collected \$13,072,428 by selling profitable FTRs on a bilateral basis to Shell and to BETM.

55. GreenHat carried out three bilateral deals with Shell, which were implemented in the September 2016, December 2016, and June 2017 FTR auctions. GreenHat received \$1,490,981 in the first deal, \$5,213,276 in the second deal, and \$4,368,171 in the third deal. In April 2018, BETM paid GreenHat \$2 million for a package of FTRs.

56. Soon after receiving these funds, GreenHat (directly or through its parent company, Off Fannin) transferred virtually all of the money to accounts controlled by Bartholomew, Ziegenhorn, and Kittell.

57. In October 2016, for example, one day after GreenHat received \$1,490,981 from Shell, it transferred \$1,490,000 to Kittell.

58. After GreenHat got a call from PJM on March 17, 2017 about a potential collateral call, the three owners met the next day to sign papers transferring virtually all

of the cash in GreenHat's account (including all of the cash from the second Shell deal) to the account of its parent, Off Fannin. Thereafter, Bartholomew, Ziegenhorn, and Kittell transferred virtually all of the money from Off Fannin to themselves.

59. After the third Shell deal in June 2017, Off Fannin promptly transferred approximately \$4.9 million to Bartholomew, Ziegenhorn, and Kittell. Finally, shortly after GreenHat received \$2 million from BETM in April 2018, it transferred virtually all of that amount (through Off Fannin) to Bartholomew, Ziegenhorn, and Kittell.

F. To Make More Money on Its Shell Deals, GreenHat Bids at Inflated Prices to Repurchase FTRs It Had Just Sold to Shell to Try to Drive Up the FTRs' Clearing Prices

60. In GreenHat's deals with Shell, it sold FTRs to Shell, which then offered the FTRs for sale into a PJM auction. Selling FTRs to third parties in this way enabled GreenHat to obtain cash for profitable FTRs in its portfolio long before the FTRs settled.

61. Under the terms of their contracts, the amount that GreenHat would receive from Shell in its deals depended, in part, on the price at which the FTRs it sold to Shell cleared in the PJM auction. That is, GreenHat would get more money from Shell if the clearing prices for the FTRs were higher.

62. In all three of the Shell deals, GreenHat sought to repurchase the exact same FTRs it had just sold to Shell. Although GreenHat was a buyer, and although economically rational buyers seek to minimize the price they pay, GreenHat submitted these bids with the intent to *raise* the auction clearing price. If those bids cleared, they could raise the auction price. A higher auction price had the effect of increasing the

amount that Shell would owe GreenHat, even though it also increased the amount that GreenHat would later owe to PJM.

63. GreenHat's bids to repurchase FTRs it had just sold to Shell were for either exactly the same volume or exactly twice the volume of Shell's offers to sell the FTRs. In the third deal, GreenHat bid for the same FTRs it had just sold to Shell at prices exactly 22.2% above Shell's offer prices.

64. Over time, GreenHat's repurchases of the same FTRs it had just sold to Shell greatly increased: in the first deal, GreenHat bid on 7% of the FTR paths it had just sold to Shell; in the second deal, 31%; and in the third deal, 89%. Collectively, over the course of the three deals, GreenHat's repurchases at higher prices of FTRs it had just sold increased the amount it would later have to pay to PJM for those FTRs, thereby driving up the size of its ultimate default by nearly \$4 million.

G. GreenHat Makes False Statements to PJM to Try to Stave Off a Margin Call That Would Bring Its Scheme to an End

65. On March 17, 2017, PJM contacted GreenHat about a possible margin call, because GreenHat's portfolio had a valuation of negative \$35 million, while GreenHat had then posted only \$1.5 million in collateral. (A margin call is a demand for a market participant to post additional collateral.) To enable it to continue its manipulative scheme, GreenHat tried to convince PJM not to proceed with its planned margin call, by falsely representing to PJM that Shell owed GreenHat more than \$62 million.

66. After falsely assuring PJM that it had a non-existent \$62 million asset, GreenHat entered into an agreement with PJM in which it agreed to give PJM the \$62

million (or as much of that amount as necessary) if it later defaulted on its FTR portfolio. As shown by its descriptions of the Shell deals to third parties and to its own auditors, GreenHat at all times knew that there was no such asset.

H. When Its FTRs Begin to Settle in June 2018, GreenHat Defaults, Forcing Other PJM Members to Pay More Than \$179 Million to Cover the Losses on Its Portfolio

67. Although GreenHat focused on purchasing long-term FTRs starting in June 2015, its largest batch of FTRs began settling in June 2018. When PJM sent GreenHat the first bill for losses on its FTRs that month, GreenHat immediately defaulted.

68. Thanks to its collateral-minimizing strategy, GreenHat had only \$559,447 on deposit with PJM when it defaulted, less than \$60,000 more than the minimum \$500,000 needed simply to be a member of PJM. As GreenHat began unloading its FTR losses on other PJM members, Bartholomew, Ziegenhorn, and Kittell did not return a penny of the \$13.1 million they had transferred to themselves from the Shell and BETM deals.

69. Under PJM's Tariff, losses on an FTR portfolio do not simply go away. Instead, between June 2018 and May 2021, other members of PJM, including utilities whose costs are passed on to consumers and businesses, were required to pay \$179,600,573 to cover GreenHat's losses.

70. In short, GreenHat's manipulative scheme resulted in \$13.1 million in profits for Bartholomew, Ziegenhorn, and Kittell, and \$179.6 million in losses for other PJM members.

V. PROCEDURAL HISTORY

A. Enforcement's Investigation

71. In June 2018, the CEO of another FTR trading firm sent an email to FERC's Enforcement Hotline about GreenHat. Enforcement promptly opened an investigation and sought documents from GreenHat, PJM, Shell, BETM, and other third parties. In late 2018 and early 2019, Enforcement took sworn testimony from Bartholomew, Ziegenhorn, and Kittell. All three invoked their Fifth Amendment rights and declined to give substantive testimony.

72. On July 21, 2020, Enforcement issued preliminary findings letters to GreenHat, Kittell, Bartholomew, and Ziegenhorn setting forth Enforcement's initial view of the evidence and seeking Defendants' response. On September 21, 2020, Defendants submitted a joint response to the preliminary findings, which attached a presentation to the U.S. Attorney's Office for the Southern District of New York and filings by GreenHat in a related FERC proceeding.

73. When it sent Defendants the preliminary findings letters, Enforcement also provided them with copies of testimony transcripts and substantive responses of third parties to Enforcement's data requests and document subpoenas.

74. On December 30, 2020, Enforcement provided notice to Defendants under Section 1b.19 of the Commission's regulations, 18 C.F.R. § 1b.19 (2020), of its intent to recommend initiation of a public proceeding against them ("1b.19 Letter").

75. Mr. Kittell died on January 6, 2021. On February 10, 2021, counsel for Luan Troxel sent Enforcement a letter stating that Ms. Troxel had not yet been appointed as executor of Mr. Kittell's estate and that to the attorney's knowledge, no one was then authorized to act for GreenHat. Neither GreenHat nor the Kittell Estate submitted a response to the 1b.19 Letter.

76. On March 29, 2021, Bartholomew and Ziegenhorn told Enforcement that they would rely on Defendants' response to Enforcement's preliminary findings letter as their response to the 1b.19 Letter.

77. Pursuant to Commission procedures, Enforcement provided a Staff Report to the Commission detailing Enforcement's findings and recommending the Commission issue an Order to Show Cause against Defendants. Enforcement also provided the Commission copies of Defendants' response to Enforcement's preliminary findings letter for the Commission's consideration in deciding whether to issue an Order to Show Cause.

B. The Commission's Adjudicative Proceeding

78. On May 20, 2021, the Commission issued an Order to Show Cause directing Defendants to show cause within 30 days why they should not be found to have violated FPA Section 222(a), 16 U.S.C. § 824v(a), and the Commission's Anti-Manipulation Rule, 18 C.F.R. § 1c.2, and be ordered to pay the following amounts recommended in the Staff Report: (a) a civil penalty of approximately \$179 million from GreenHat; (b) civil penalties of \$25 million each from Bartholomew and Ziegenhorn; and (c) disgorgement of unjust profits of \$13,072,428, plus interest, jointly and severally against

all Defendants. Issuance of the Order to Show Cause commenced a “contested, on the record proceeding,” subject to the Commission’s Rules of Practice and Procedure. *See* 18 C.F.R. Part 385; *see also* 18 C.F.R. §§ 385.209(a)(2) (providing for commencement of a proceeding by issuing an Order to Show Cause) and 385.2201(c)(1)(i) (defining proceeding arising from an investigation as a “contested, on the record proceeding”). The Order to Show Cause proceeding was an “adjudication” under the Administrative Procedure Act; *see* 5 U.S.C. § 551(7) (defining “adjudication” as an “agency process for the formulation of an order”).

79. In accordance with FPA Section 31(d)(1), 16 U.S.C. § 823b(d)(1), the Order to Show Cause notified Defendants of their statutory right to elect for the Commission to apply the procedures in FPA Section 31(d)(3)(A), 16 U.S.C. § 823b(d)(3)(A), to the proceeding. That provision requires the Commission to “promptly assess” a penalty “by order.” On July 11, 2021, Defendants elected the procedures under FPA Section 31(d)(3)(A), thereby waiving their opportunity for a formal hearing before an administrative law judge under FPA Section 31(d)(2)(A), 16 U.S.C. § 823b(d)(2)(A) (which, if elected, would have been followed by Commission assessment of any penalty by order). Based on Defendants’ election, the Commission conducted a “paper hearing.”

80. On July 6, 2021, Defendants filed a joint answer to the Order to Show Cause and the Kittell Estate filed a separate answer. On July 27, 2021, Enforcement filed a reply to Defendants’ answers to the Order to Show Cause. Thereafter, on August 23, 2021, the Kittell Estate filed a sur-reply to Enforcement’s Reply, along with a motion seeking leave to file the sur-reply.

81. On November 5, 2021, the Commission issued the Penalty Order (Exhibit 1 hereto) after reviewing the pleadings and the extensive investigative record, including Defendants' submissions to Enforcement and its Answer to the Order to Show Cause. The Commission determined that all of the Defendants violated FPA Section 222(a), 16 U.S.C. § 824v(a), and the Commission's Anti-Manipulation Rule, 18 C.F.R. § 1c.2, by engaging in a manipulative scheme in PJM's FTR market. The Commission also determined that GreenHat violated the PJM Tariff and Operating Agreement by making false certifications to PJM and by failing to comply with its obligation to pay for losses on its FTRs. The Commission declined to accept the Kittell Estate's sur-reply on the grounds that it was not authorized by Commission procedures. The Commission ordered GreenHat to pay a civil penalty of \$179,600,573; directed Bartholomew and Ziegenhorn each to pay a civil penalty of \$25 million; and ordered all Defendants, jointly and severally, to disgorge unjust profits of \$13,072,428, plus interest.

82. Defendants failed to pay the penalties and disgorgement assessed by the Commission within the 60-day payment period provided for in FPA Section 31(d)(3)(B), 16 U.S.C. § 823b(d)(3)(B), which ended on January 4, 2022.

C. The Parties' Tolling Agreements

83. On August 21, 2020, GreenHat and Kittell entered into a tolling agreement with Enforcement that extended the running of the statute of limitations for 30 days beyond the otherwise applicable limitations period. Bartholomew and Ziegenhorn did the same on August 24, 2020.

84. On January 25, 2021, Bartholomew and Ziegenhorn entered into tolling agreements that extended the running of the statute of limitations for an additional 60 days beyond the otherwise applicable limitations period.

VI. DEFENDANTS’ CONDUCT MET THE THREE ELEMENTS OF THE COMMISSION’S ANTI-MANIPULATION RULE

A. Defendants Engaged in a Manipulative Scheme and Made False Statements to PJM

85. Defendants’ conduct constituted a “manipulative or deceptive device or contrivance” within the meaning of FPA Section 222(a), 16 U.S.C. § 824v(a), and a “device, scheme, or artifice to defraud” within the meaning of the Commission’s Anti-Manipulation Rule, 18 C.F.R. § 1c.2(a)(1), (3). In addition, Defendants made “untrue statement[s] of . . . material fact” to PJM to try to persuade it not to issue a margin call, thereby violating 18 C.F.R. § 1c.2(a)(2).

86. Defendants violated FPA Section 222(a) and the Commission’s Anti-Manipulation Rule in four different ways. *First*, Defendants engaged in conduct similar to a classic bust-out scheme. They (1) amassed a huge FTR portfolio based not on building a profitable portfolio but on acquiring FTRs with virtually no upfront cash; (2) bought primarily long-term FTRs; (3) planned not to pay for losses at settlement; and (4) obtained cash for Bartholomew, Ziegenhorn, and Kittell by selling profitable FTRs within their overall money-losing portfolio to third parties.

87. *Second*, Defendants violated FPA Section 222(a) and the Anti-Manipulation Rule by trading in a way to minimize collateral requirements, rather than to build a profitable portfolio, with the intent not to pay for GreenHat’s losses at settlement.

88. *Third*, Defendants violated FPA Section 222(a) and the Anti-Manipulation Rule by falsely telling PJM that Shell owed GreenHat \$62 million. The purpose of these false statements was to persuade PJM not to issue a margin call, thereby enabling GreenHat to continue its manipulative scheme.

89. *Fourth*, Defendants violated FPA Section 222(a) and the Anti-Manipulation Rule by submitting bids into PJM FTR auctions targeting the same FTRs that GreenHat had just sold to Shell. The intent of these bids was to raise the auction clearing price for FTRs that Shell bought from GreenHat, thereby making GreenHat's bilateral deals with Shell more profitable.

B. Defendants Acted Knowingly and Intentionally

90. Defendants acted with the requisite scienter under FPA Section 222 and the Commission's Anti-Manipulation Rule. Defendants, individually and together, knowingly and intentionally participated in all four violations described above.

91. Each of GreenHat's three owners, and through them GreenHat, knowingly and intentionally, participated actively over a period of years in the overall manipulative scheme: purchasing massive volumes of FTRs not to build a profitable portfolio but to amass a huge one with virtually no collateral, and then selling profitable FTRs within the portfolio to generate cash for GreenHat's owners. Bartholomew was GreenHat's trader and developed the collateral-minimizing technique that GreenHat used to select FTRs; Ziegenhorn was its risk executive and led several efforts to find third-party buyers; and Kittell participated in all aspects of GreenHat's business. All three told third parties that GreenHat paid no attention to fundamentals and instead purchased FTRs based on

minimizing collateral. These facts, among others, establish scienter for each of the Defendants as to the first two violations.

92. GreenHat's three owners, and through them GreenHat, also knowingly and intentionally participated in GreenHat's making false statements to PJM about a non-existent \$62 million debt to try to avoid a margin call. Convincing PJM not to proceed with a margin call was necessary to enable GreenHat to continue its manipulative scheme and generate additional funds for its owners. That all three participated in the plan to make false statements to PJM is demonstrated, among other things, by logs showing a flurry of emails to and from the three owners as they sought to prevent a collateral call.

93. Finally, the three owners, and through them GreenHat, also knowingly and intentionally participated in GreenHat's practice of placing uneconomic bids on FTRs that GreenHat had just sold to Shell, for the purpose of inflating clearing prices and thereby making more money in GreenHat's deals with Shell. All three owners participated in this aspect of the firm's scheme: Kittell played a key role in all of GreenHat's activities, Bartholomew was the firm's trader, and Ziegenhorn was its risk executive.

C. Defendants' Scheme Was Jurisdictional

94. The Commission has jurisdiction over Defendants' conduct because the trades at issue were implemented under PJM's Commission-approved tariff within a market operated by a Commission-regulated Regional Transmission Organization. Moreover, courts have affirmed the Commission's "authority [under the FPA] to regulate

the activity of traders who participate in energy markets.” *Kourouma v. FERC*, 723 F.3d 274, 276 (D.C. Cir. 2013).

VII. REMEDIES AND SANCTIONS

95. The Commission ordered GreenHat to pay a civil penalty of \$179,600,573 and ordered Bartholomew and Ziegenhorn each to pay a civil penalty of \$25,000,000. The Commission found these penalties to be statutorily authorized under the FPA and appropriate based on the penalty factors set forth in FPA Section 316A(b), 16 U.S.C. § 825o-1(b). In determining the appropriate penalties, the Commission considered that Defendants caused \$179,600,573 in market harm because other members of PJM were forced to pay, in full, for GreenHat’s default. The Commission also considered several other aggravating factors.

96. The Commission also ordered GreenHat, Bartholomew, Ziegenhorn, and the Kittell Estate, jointly and severally, to disgorge \$13,072,428 in unjust profits, plus interest. The Commission has the ability to do so in this action under its flexible powers to “perform any and all acts . . . as it may find necessary or appropriate to carry out the provisions of this Act.” FPA Section 309, 16 U.S.C. § 825h. Under this provision, the Commission may order remedies not expressly set forth in the statute so long as “the agency’s action conforms with the purposes and policies of Congress and does not contravene any terms of the Act.” *Niagara Mohawk Power Corp. v. Fed. Power Comm’n*, 379 F.2d 153, 158 (D.C. Cir. 1967).

97. Plaintiff respectfully submits that this Court can and should affirm and enforce the Commission’s penalty assessments and disgorgement order without modification as set forth in the Penalty Order.

FIRST CLAIM FOR RELIEF

(Against All Defendants for Violating FPA Section 222, 16 U.S.C. § 824v, and the Commission’s Anti-Manipulation Rule, 18 C.F.R. § 1c.2)

98. The Commission restates and incorporates by reference the paragraphs above as if set forth fully herein.

99. Defendants used or employed a fraudulent device, scheme, or artifice, or engaged in an act, practice, or course of business that operated as a fraud or deceit, with scienter, in connection with electric energy subject to the jurisdiction of the Commission in contravention of FPA Section 222, 16 U.S.C. § 824v, and the Commission’s Anti-Manipulation Rule, 18 C.F.R. § 1c.2.

100. In addition, Defendants made “untrue statement[s] of . . . material fact” to PJM to try to persuade it not to issue a collateral call, thereby violating 18 C.F.R. § 1c.2(a)(2).

SECOND CLAIM FOR RELIEF

(Against GreenHat for Violating PJM’s Tariff and Operating Agreement)

101. The Commission restates and incorporates by reference Paragraphs 1 through 97, inclusive, as if set forth fully herein.

102. GreenHat violated PJM’s Tariff by making false certifications to PJM and violated PJM’s Operating Agreement by failing to pay for losses on its FTR portfolio.

* * * * *

103. Accordingly, the Commission is entitled to an Order from this Court affirming its assessment of civil penalties against GreenHat, Bartholomew, and Ziegenhorn under FPA Section 31(d)(3)(B), 18 U.S.C. § 823b(d)(3)(B), and ordering Defendants, jointly and severally, to disgorge their unjust profits, plus interest.

REQUESTED RELIEF

WHEREFORE, the Commission respectfully requests that this Court:

(A) Enter an order and judgment affirming the Commission's assessment of a \$179,600,573 civil penalty against GreenHat.

(B) Enter an order and judgment affirming the Commission's assessment of \$25,000,000 in civil penalties against Bartholomew and against Ziegenhorn.

(C) Enter an order requiring all Defendants, jointly and severally, to disgorge \$13,072,428, plus interest, in unjust profits.

(D) Order such other and further relief as the Court may deem necessary and appropriate.

DATED: January 6, 2022

FEDERAL ENERGY REGULATORY
COMMISSION

Respectfully submitted,

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